

Sr.	8	Pre-Commissioning and Commissioning Dossier Index	Applicable (Yes/No)
		8.01) System Mechanical Index	
		8.02) Equipment Drawings	
		8.03) Equipment Datasheets	
		8.04) Boxing-up Certificates	
Sr.	7	Piping Commissioning	
		7.01) Service Test, GLT, CLT and N2 Purging Certificates	
		7.02) Piping Commissioning Check Lists	
Sr.	6	Piping Pre-Commissioning	
		6.01) Piping Test Packs	
		6.02) Piping Pre-commissioning Check Lists	
Sr.	5	System Index	
Sr.	4	System Limits Marked Up P&ID	
Sr.	3	System Punch Lists	
Sr.	2	Ready for Startup Certificate (RFSU)	
Sr.	1	Mechanical Completion Certificate (MCC)	
Sr.		Pre-Commissioning and Commissioning Dossier Index	Applicable (Yes/No)



**Enppi**



Project No. 1251-100  
Crude Oil Tank Farms Project, Agrod Area 30 (Module-1)

030-EL-007

System ID

Substation Building Lighting and small power system

System Description





	8.05) Grouting Certificates	
	8.06) Pre-Alignment Certificates	
	8.07) Mechanical Pre-Commissioning Checklists	
9	<b>Mechanical Commissioning</b>	
	9.01) Final Alignment Certificates	
	9.02) Motor Solo Run Certificates	
	9.03) Mechanical Run Test (MRT) Certificates	
	9.04) Mechanical Commissioning Checklists	
	9.05) Mechanical Supplier Check Lists & Reports	
10	<b>Instrumentation Pre-Commissioning</b>	
	10.01) System Instrument Index	
	10.02) Instrument Data Sheets	
	10.03) Instrument Cable Schedule	
	10.04) System Instrumentation Wiring Diagram	
	10.05) Hook-up Drawing (Mechanical & Pneumatic)	
	10.06) Instruments Cables Schedule	
	10.07) Instruments Cables Laying Certificates	
	10.08) Instruments Cables Termination Certificates	
	10.09) Instruments Cables Testing Certificates	
	10.10) Instruments Calibration Certificates	
	10.11) Instrument Loop Checks Certificates	
	10.12) Instrumentation Pre-Commissioning Check Lists	
	10.13) Instrumentation Supplier Check Lists & Reports	
11	<b>Instrumentation Commissioning</b>	
	11.01) Instrumentation Function Test Certificates	
	11.02) Instrumentation Supplier Check Lists & Reports	
Sr.	<b>Pre-Commissioning and Commissioning Dossier Index</b>	<b>Applicable (Yes/No)</b>
12	<b>Electrical Pre-Commissioning</b>	
	12.01) System Electrical Index	
	12.02) Electrical Drawings	
	12.03) Motor Datasheets	
	12.04) Electrical Cables Schedule	
	12.05) Electrical Cables Laying Certificates	
	12.06) Electrical Cables Testing Certificates	
	12.07) Electrical Cables Termination Certificates	
	12.08) FAT Reports & Certificates	
	12.09) SAT Reports & Certificates	
	12.10) Electrical Pre-Commissioning Check Lists	
	12.11) Electrical Supplier Check Lists & Reports	

13	Electrical Commissioning	
	13.01) Electrical-Commissioning Check Lists	
	13.02) Electrical Supplier Check Lists & Reports	
14	Red Marked-up Drawings	
	14.01) P&ID	
	14.02) Instrumentation Drawings	
	14.03) Electrical Drawings	


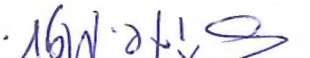
Pre-commissioning and Commissioning Dossier Content:

Section	Description	Status
1-	Mechanical Completion Certificate (MCC) Ready For Start-up (RFSU)	
2-	System Punch Lists	
3-	System Limits Marked Up	
4-	FAT Test Report & Certificates	
5-	System Index.	
6-A-	Electrical Pre-commissioning	
6.A.1	General Arrangement and Wiring Diagrams	
6.A.2	Single line Diagram	
6.A.3	Electrical Panel Schedule	
6.A.4	Electrical Cable Schedule	
6.A.5	Pre-Commissioning Check List	
6-B-	Electrical Commissioning	
6.B.1	Commissioning Check List	
7-	Red Mark-Up Drawings (If Any)	



 Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA) 	
System ID	030-EL-007
System Description	Substation Building Lighting and small power system

I-Mechanical Completion Certificate (MCC)

DATE	12/04/2021	12/04/2021	18/05/2021
SIGNATURE			
TITLE	G.C. Engineer		
NAME	M. Abdallah	Mohamed Abdallah	M. Omar
COMPANY	PETROJET	ENPPI	PMC

**EXCEPTIONS:**



THIS IS TO CERTIFY THAT:


- THE ABOVE SYSTEM HAS BEEN FABRICATED, ERECTED, INSTALLED AND TESTED TO THE REQUIREMENTS OF THE CONTRACT DRAWINGS, SPECIFICATIONS, THE APPLICABLE CODES AND STANDARDS.
- ALL PRE-COMMISSIONING RELEVANT ACTIVITIES, TESTS, INSPECTIONS AND CHECKS HAVE BEEN CARRIED OUT FOR THIS SYSTEM AND FOUND ACCEPTABLE.
- Q/C DOCUMENTATION OF THE ABOVE SYSTEM HAS BEEN AUDITED BY THE CUSTOMER SITE QUALITY CONTROL AND FOUND COMPLETED.
- ALL PUNCH LIST ITEMS CATEGORY (A) IN THIS SUBSYSTEM WERE CLEARED.
- THIS SYSTEM IS MECHANICALLY COMPLETED ON THE DATE 01/02/2021 AND READY FOR COMMISSIONING (RFC) WITH THE FOLLOWING EXCEPTIONS.

PROJECT TITLE	: CRUDE OIL TANK FARM PROJECT (AGROOD AREA)
PROJECT No	: 01251-100
SYSTEM NAME	: Substation Building Lighting and small power system
SYSTEM ID	: 030-EL-007

**SYSTEM MECHANICAL COMPLETION CERTIFICATE**  
(MCC)



<div><div><p>Enppi PETROJET</p></div><div><p>Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</p></div><div><p>الهيئة العامة للغازات والبترول الوزارة العامة للغازات والبترول</p></div></div>		System ID	030-EL-007
		System Description	Substation Building Lighting and small power system
<div>2- Ready for Startup Certificate (RFSU)</div>			

DATE	31-5-2021	
SIGNATURE		
TITLE	Commissioning Mgr	Elc. Engineer
NAME	Ahmed El Shafie	M. Ibrahim
COMPANY	CONSORTIUM	PPC

**EXCEPTIONS:**

- THIS IS TO CERTIFY THAT:
- THE MENTIONED SYSTEM / AREA / PLANT IS READY FOR START UP WHERE ALL MECHANICAL WORKS, PRECOMMISSIONING AND COMMISSIONING ACTIVITIES HAVE BEEN SUCCESSFULLY COMPLETED.
  - MECHANICAL COMPLETION CERTIFICATE(S) FOR THE MENTIONED SYSTEM / AREA / PLANT HAVE BEEN SIGNED.
  - ISSUANCE OF THIS READY FOR START UP CERTIFICATE(S) SHALL NOT RELIEVE CONTRACTOR(S) FROM THEIR OBLIGATIONS TO COMPLETE THE REMAINING SYSTEMS NOR FROM THEIR WARRANTY OBLIGATIONS AND OTHER PROVISIONS OF THE CONTRACT.
  - THE FOLLOWING EXCEPTIONS AGREED TO BE CLEARED AFTER START UP AND WILL NOT PREVENT START UP ACTIVITIES.

SYSTEM / AREA / PLANT No. : 030-EL-007

SYSTEM / AREA / PLANT : Substation Building Lighting and small power system



PROJECT No. : 1251-100




PROJECT TITLE : EGPC CRUDE OIL TANK FARMS PROJECT (AGROOD-03)

**READY FOR START UP CERTIFICATE**
**Enppi**






### 3-System Punch Lists

	
Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)	
	
System ID	030-EL-007
System Description	Substation Building Lighting and small power system

COMPANY	PTJ	NAME	Saby Sdean	SIGN.		DATE	28-3-22
	ENPPI						
PMC		Mohamed Ibrahim					28-3-22

# 4-System Limits Marked Up P&ID

 <b>Enppi</b> PETROJET		Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)	 وزارة البترول والصناعات الكيماوية
System ID		030-EL-007	
System Description		Substation Building Lighting and small power system	




# 5-System Index

System ID	030-EL-007
System Description	Substation Building Lighting and small power system

Project: 01ZSI-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)




# 6- Piping Pre-Commissioning

 <p>Enppi Petrojet</p>	
<p>Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</p>	
System ID	030-EL-007
System Description	Substation Building Lighting and small power system



6.01- Piping Test Packs


System ID	030-EL-007
System Description	Substation Building Lighting and small power system



Enppi Petrojet

Project: 01251-100



CRUDE OIL TANK FARM PROJECT (AGROOD AREA)





سعودية أرامكو





## 6.02- Piping Pre-commissioning Check Lists

System ID	030-EL-007	System Description	Substation Building Lighting and small power system
<div data-bbox="1101 1948 1380 2038">  </div> <div data-bbox="494 1926 1005 2004"> <p>Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</p> </div> <div data-bbox="199 1904 406 2004">  </div>			

# 7- Piping Commissioning



<div>  <div> <div>Project: 01251-100</div> <div>CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</div> </div> <div>  <div> <div>شركة</div> <div>النفط</div> <div>القطرية</div> </div> </div> </div>		System ID	030-EL-007
		System Description	Substation Building Lighting and small power system



# 7.01- Service Test, GLT, CLT and N2 Purging Certificates

 <b>Enppi</b> PETROJET		Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)			
System ID		030-EL-007			
System Description		Substation Building Lighting and small power system			





## 7.02-Piping Commissioning Check Lists

System ID		030-EL-007	
System Description		Substation Building Lighting and small power system	
 <b>Enppi</b> PETROJET			
Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)			
 PETROJET			

 <b>Enppi</b> PETROJET		Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)	
System ID		030-EI-007	
System Description		Substation Building Lighting and small power system	


## 8- Mechanical Pre-Commissioning

## 8.01-System Mechanical Index

System ID	030-EL-007
System Description	Substation Building Lighting and small power system
<div data-bbox="1117 1937 1396 2027"> PETROJET</div> <div data-bbox="518 1926 1013 1982">Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</div> <div data-bbox="231 1904 438 1993"></div>	




# 8.02- Equipment Drawings

 <b>Enppi</b> PETROJET	
Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)	
System ID	030-EI-007
System Description	Substation Building Lighting and small power system




# 8.03- Equipment Datasheets

 <b>Enppi</b> PETROJET	
Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)	
System ID	030-EL-007
System Description	Substation Building Lighting and small power system

<div data-bbox="252 1899 450 1989" data-label="Image"> </div> <div data-bbox="529 1921 1029 1982" data-label="Text"> <p>Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</p> </div>	<div data-bbox="1129 1930 1401 2011" data-label="Image"> </div>
System ID	030-EL-007
System Description	Substation Building Lighting and small power system

# 8.04- Boxing-up Certificates



# 8.05- Grouting Certificates



 <b>Enppi</b> PETROJET	
Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)	
System ID 030-EL-007	System Description Substation Building Lighting and small power system







# 8.06- Pre-Alignment Certificates

 <b>Enppi</b> PETROJET		Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)			
System ID		030-EL-007			
System Description		Substation Building Lighting and small power system			

 <b>Enppi Petrojet</b>		Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)	
System ID	030-EL-007		
System Description	Substation Building Lighting and small power system		


## 8.07- Mechanical Pre-Commissioning Checklists

# 9- Mechanical Commissioning

System ID		030-EL-007
System Description		Substation Building Lighting and small power system
<div><b>Enppi</b> PETROJET</div> <div>Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</div> <div></div>		

# 9.01- Final Alignment Certificates



System ID	030-EL-007	System Description	Substation Building Lighting and small power system
<div data-bbox="1091 1957 1370 2042" data-label="Image"> </div> <div data-bbox="494 1926 997 2000" data-label="Text"> <p>Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</p> </div> <div data-bbox="220 1899 418 1984" data-label="Image"> </div>			

	
Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)	
System ID	030-EL-007
System Description	Substation Building Lighting and small power system

# 9.02- Motor Solo Run Certificates



Empty space for certificates
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 <b>Enppi</b> PETROJET	
Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)	
	
System ID	030-EL-007
System Description	Substation Building Lighting and small power system

## 9.03- Mechanical Run Test (MRT) Certificates



## 9.04- Mechanical Commissioning Checklists

System Description	Substation Building Lighting and small power system
System ID	030-EL-007
<div data-bbox="1117 1935 1390 2016">  <b>Enppi</b>          PETROJET          شركة البترول       </div> <div data-bbox="518 1924 1021 1984">         Project: 01251-100          CRUDE OIL TANK FARM PROJECT (AGROOD AREA)       </div> <div data-bbox="242 1899 442 1984">          المملكة العربية السعودية          وزارة البترول       </div>	



# 9.05- Mechanical Supplier Check Lists & Reports

System ID		System Description	
030-EL-007		Substation Building Lighting and small power system	
<div>  <b>Enppi</b>              PETROJET         </div> <div>             Project: 01251-100              CRUDE OIL TANK FARM PROJECT (AGROOD AREA)         </div> <div>  </div>			

# 10- Instrumentation Pre-Commissioning


System ID	030-EL-007
System Description	Substation Building Lighting and small power system
<div data-bbox="1101 1937 1380 2038">  <b>Enppi</b>              PETROJET         </div> <div data-bbox="502 1926 1013 2004">             Project: 01251-100              CRUDE OIL TANK FARM PROJECT (AGROOD AREA)         </div> <div data-bbox="223 1892 430 1993">  </div>	

# 10.01- System Instrument Index

System ID	030-EI-007
System Description	Substation Building Lighting and small power system
<div data-bbox="1104 1939 1385 2024">  <b>Enppi</b>              PETROJET         </div> <div data-bbox="507 1921 1011 1989">             Project: 01251-100              CRUDE OIL TANK FARM PROJECT (AGROOD AREA)         </div> <div data-bbox="236 1895 434 1984">  </div>	





# 10.02-Instrument Data Sheets



 <b>Enppi</b> PETROJET CRUDE OIL TANK FARM PROJECT (AGROOD AREA) Project: 01251-100	
System ID	030-EI-007
System Description	Substation Building Lighting and small power system





# 10.03- Instrument Cable Schedule

System ID	030-EL-007
System Description	Substation Building Lighting and small power system
<div data-bbox="1123 1924 1406 2009">  </div> <div data-bbox="526 1912 1029 1980"> <p>Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</p> </div> <div data-bbox="250 1890 450 1980">  </div>	

# 10.04-System Instrumentation Wiring Diagram

System ID	030-EL-007
System Description	Substation Building Lighting and small power system
<div data-bbox="1107 1946 1378 2024">  </div> <div data-bbox="509 1924 1011 1991"> <p>Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</p> </div> <div data-bbox="229 1901 429 1980">  </div>	

# 10.05- Hook-up Drawing (Mechanical & Pneumatic)

System ID		030-EL-007
System Description		Substation Building Lighting and small power system
<div><b>Enppi</b> PETROJET</div> <div>Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</div> <div></div>		

# 10.06-Instruments Cables Schedule

System ID	System Description
030-EL-007	Substation Building Lighting and small power system




Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)






# 10.07- Instruments Cables Laying Certificates

 <b>Enppi</b> PETROJET	
Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)	
System ID	030-EL-007
System Description	Substation Building Lighting and small power system





# 10.08-Instruments Cables Termination Certificates



 <b>Enppi</b> PETROJET	
Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)	
System ID	030-EI-007
System Description	Substation Building Lighting and small power system





# 10.09- Instruments Cables Testing Certificates

System ID		030-EL-007
System Description		Substation Building Lighting and small power system
<div><b>Enppi</b> PETROJET</div> <div>Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</div> <div></div>		

# 10.10- Instruments Calibration Certificates

 <b>Enppi</b> PETROJET		Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)	 جمهورية العراق وزارة النفط
System ID		030-EI-007	
System Description		Substation Building Lighting and small power system	


# 10.11- Instrument Loop Checks Certificates

System ID		030-EL-007
System Description		Substation Building Lighting and small power system
 <b>Enppi</b> PETROJET Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA) 		

System ID	System Description
030-EL-007	Substation Building Lighting and small power system

# 10.12- Instrumentation Pre-Commissioning Check Lists



# 10.13- Instrumentation Supplier Check Lists & Reports



 <b>Enppi</b> PETROJET	
Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)	
System ID	030-EL-007
System Description	Substation Building Lighting and small power system







# 11- Instrumentation Commissioning

 <b>Enppi</b> PETROJET	
Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)	
	
System ID	030-EL-007
System Description	Substation Building Lighting and small power system

 <b>Enppi</b> PETROJET شركة البترول Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA) 		System ID	030-EI-007	System Description	Substation Building Lighting and small power system
--	--	-----------	------------	--------------------	---

# 11.02- Instrumentation Supplier Check Lists & Reports

System ID	030-EI-007
System Description	Substation Building Lighting and small power system
<div data-bbox="1133 1919 1401 2004">  </div> <div data-bbox="533 1919 1034 1973">           Project: 01251-100            CRUDE OIL TANK FARM PROJECT (AGROOD AREA)         </div> <div data-bbox="256 1897 454 1982">  </div>	

## 12- Electrical Pre-Commissioning



System ID	System Description
030-EI-007	Substation Building Lighting and small power system



Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)





# 12.01-System Electrical Index

System ID	030-EL-007
System Description	Substation Building Lighting and small power system
<div data-bbox="1107 1942 1383 2024">  <b>Enppi</b>              PETROJET           </div> <div data-bbox="510 1919 1011 1986">             Project: 01251-100              CRUDE OIL TANK FARM PROJECT (AGROOD AREA)           </div> <div data-bbox="236 1897 432 1980">  </div>	

030-EL-007	Substation Building Lighting and small power system	Electrical	030-SUB-LPDP - 1	Power Distribution Panel	Form type	Check Forms ID
030-EL-007	Substation Building Lighting and small power system	Electrical	C-030-SUB-PC-1	LV Cable	Checklist	EL-23 A /EL-24 A /EL-30 A
030-EL-007	Substation Building Lighting and small power system	Electrical	P-030-SUB-LPDP-1	LV Cable	Checklist	EL-31 A
					Checklist	EL-31 A

# 12.02- Electrical Drawings

<div>  <div> <div>Enppi</div> <div> <div>پتروپراجيکٽ</div> <div>PETROJET</div> </div> </div> </div>	
<div> <div>Project: 01251-100</div> <div>CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</div> <div>  </div> </div>	
System ID	030-EL-007
System Description	Substation Building Lighting and small power system

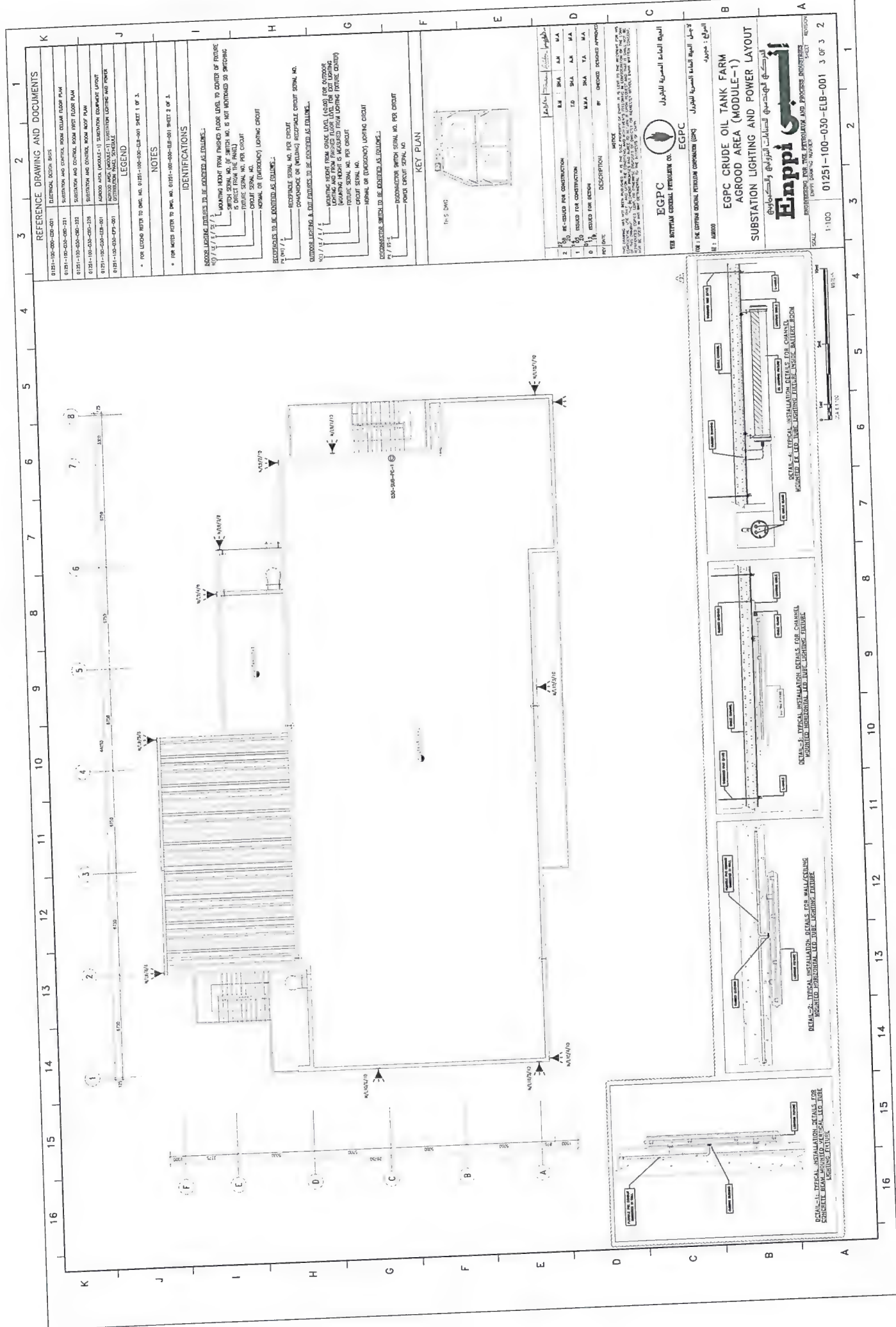










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YVES BERTHIAUD GENERAL PERSUASION CO.  
 EGPC  
 (Logo: A stylized oil drop inside a circle)  
 EGPC  
 لاجل المياه العذبة للزئول  
 المياه العذبة العصرية للزئول  
 المربع : 400000  
 NO. 106 THE OFFICIAL PERSUASION CORPORATION (EGPC)

EGPC CRUDE OIL TANK FARM  
AGROOD AREA (MODULE-1)  
SUBSTATION LIGHTING AND POWER LAYOUT

**Enppi**

إف بي إي  
معدات للصلابة الترابية والكسارات

REGISTERED FOR THE PETROLEUM AND PROCESS INDUSTRIES

SAUDI ARABIA

SCALE	1:100	ENRPI DRAWING NUMBER	01251-100-030-ELB-001	3 OF 3	2
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# AGROOD AREA (MODULE-1) SUBSTATION LIGHTING AND POWER DISTRIBUTION PANEL (030-SUB-LPDP-1) SCHEDULE

## REFERENCES

DOCUMENT NUMBER	DESCRIPTION
01251-100-000-RDB-001	PROJECT DESIGN BASIS
01251-100-030-EES-001	AGROOD AREA (MODULE-1)- ELECTRICAL FOR VEHICLES SWITCHGEAR SCHEDULE (030-SUB-LVSTG-1)
01251-100-030-ECS-001	AGROOD AREA (MODULE-1)- ELECTRICAL CABLES SCHEDULE
01251-100-030-ELB-001	AGROOD AREA (MODULE-1)- SUBSTATION LIGHTING AND SMALL POWER LAYOUT

REV	DATE	DESCRIPTION	BY	CHECKED	APPROVED
1	14/01/2024	ISSUED FOR CONSTRUCTION	T.O	SHA	A.H
0	14/01/2024	ISSUED FOR DESIGN	M.M.A	SHA	T.A
0	14/01/2024	ISSUED FOR DESIGN	M.M.A	SHA	T.A

NOTES  
THIS DRAWING HAS NOT BEEN REVISIONED. IT IS THE USER'S RESPONSIBILITY TO CHECK THE REVISIONS OF THIS DRAWING AND TO UPDATE THE DRAWING TO THE LATEST REVISION. THE USER SHALL BE RESPONSIBLE FOR THE CORRECTION OF THE DRAWING TO THE LATEST REVISION. THE USER SHALL BE RESPONSIBLE FOR THE CORRECTION OF THE DRAWING TO THE LATEST REVISION. THE USER SHALL BE RESPONSIBLE FOR THE CORRECTION OF THE DRAWING TO THE LATEST REVISION.



EGPC  
THE EGYPTIAN GENERAL PETROLEUM CO

المجلس العامة المصرية للبترول  
EGPC

FOR : THE EGYPTIAN GENERAL PETROLEUM CORPORATION (EGPC)  
AT : WAS SHUKER

EGPC CRUDE OIL TANK FARM  
AGROOD AREA (MODULE-1)  
SUBSTATION LIGHTING & POWER DISTRIBUTION PANEL  
COVER PAGE

البركة الهندسة والصناعات البترولية والكابلات  
Enppi

SCALE	DOCUMENT NUMBER	SHEET	REVISION
NTS	01251-100-030-EPS-001	01/05	1




















## INDEX

SH.	DESCRIPTION	REV.
1	COVER PAGE	1
2	INDEX, NOTES AND LEGEND	1
3	SUBSTATION LIGHTING & POWER DISTRIBUTION PANEL SCHEDULE	1
4	SUBSTATION LIGHTING & POWER DISTRIBUTION PANEL SCHEDULE	1
5	SUBSTATION LIGHTING & POWER DISTRIBUTION PANEL SCHEDULE	1

## NOTES

- PANEL SHALL BE EQUIPPED WITH 3 LED INDICATIONS FOR VOLTAGE PRESENCE.
- ALL INCOMING AND OUTGOING CIRCUIT BREAKERS SHALL BE PROVIDED WITH ON/OFF/FAULT LED INDICATION LAMPS WITH COLORS RED/GREEN/YELLOW RESPECTIVELY.
- PANEL SHALL BE EQUIPPED WITH LAMP TEST PUSH BUTTON FOR ALL LED INDICATIONS LAMPS.
- PANEL SHALL BE FREE STAND (GROUND MOUNTED).
- PANEL SHALL BE BOTTOM ENTRY.
- PANEL DEGREE OF INGRESS PROTECTION SHALL BE IP41 AS MINIMUM.
- PANEL FINISH COLOR SHALL BE RAL-7035.

## LEGEND

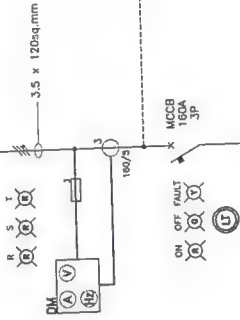
	MOULDED CASE CIRCUIT BREAKER (MCCB)
	MINIATURE CIRCUIT BREAKER (MCB)
	CONTACTOR
	EARTH LEAKAGE PROTECTION THROUGH RESIDUAL CURRENT CIRCUIT BREAKER (RCCB) - (100mA)
	THERMAL & MAGNETIC PROTECTION
	DIGITAL MULTIMETER
	PHOTOCELL
	FUSE
	SELECTOR SWITCH (MANUAL-OFF-AUTO)
	CURRENT TRANSFORMER
	INDICATION LAMP (R: RED, G: GREEN, Y: YELLOW)
	CONTACTOR CLOSE PUSH BUTTON (GREEN COLOR)
	CONTACTOR OPEN PUSH BUTTON (RED COLOR)
	LAMP TEST PUSH BUTTON
	LINE AND NEUTRAL
	3PHASE
	3PHASE AND NEUTRAL
	3PHASE AND REDUCED NEUTRAL
	POTENTIAL EARTH (PE)

EGPC CRUDE OIL TANK FARM  
AGROOD AREA (MODULE-1)  
SUBSTATION LIGHTING & POWER DISTRIBUTION PANEL  
INDEX, NOTES AND LEGEND

الدراسة الهندسية للصناعات البترولية والكهربائية  
**Enppi**  
ENGINEERING FOR THE PETROLEUM AND PROCESS AREA INDUSTRIES

SCALE	DOCUMENT NUMBER	REVISION
NTS	01251-100-030-EPS-001	02/05
		1

FROM  
030-SUB-LYSWG-1

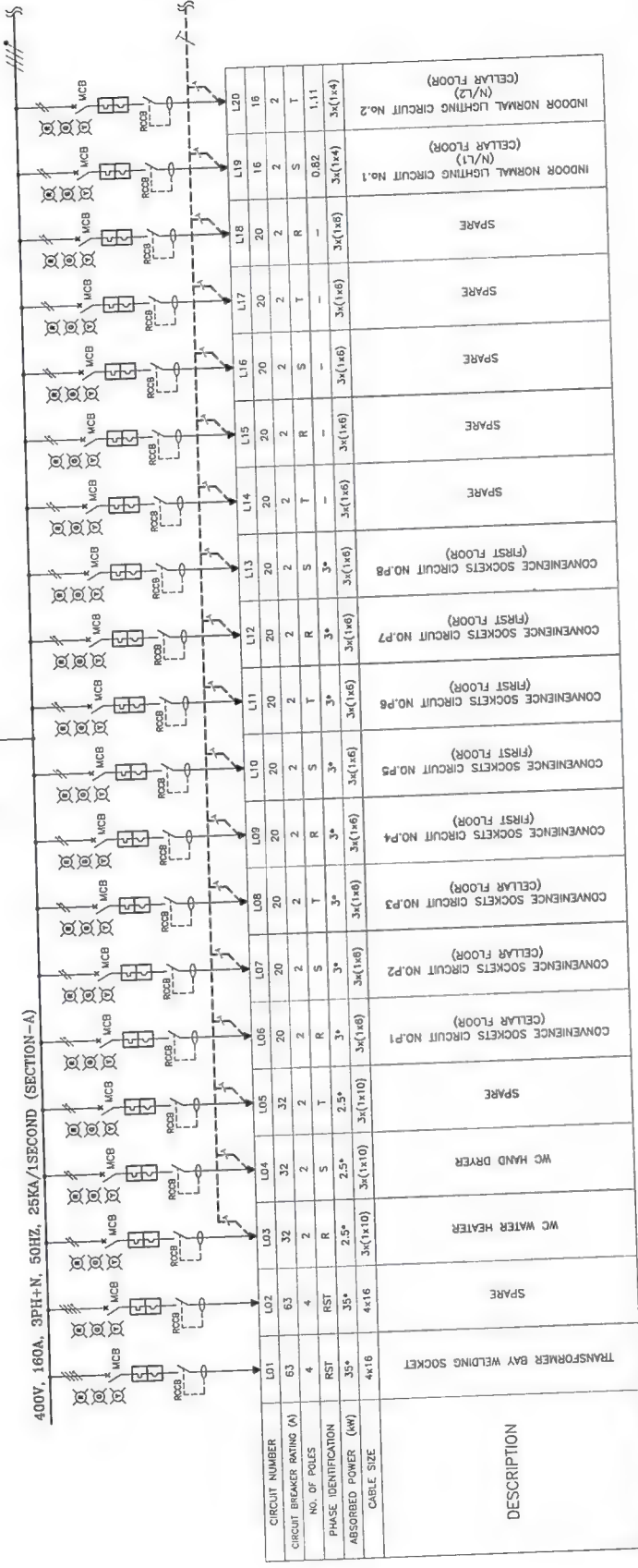


FOR CONTINUATION  
REFER TO SHEET 4

MCB  
160A  
20A

PILLOT WIRE

400V, 160A, 3PH+N, 50HZ, 25KA/1SECOND (SECTION-A)



\* MAXIMUM ABSORBED POWER AT 0.8 POWER FACTOR

EGPC CRUDE OIL TANK FARM  
AGROOD AREA (MODULE-1)  
SUBSTATION LIGHTING & POWER DISTRIBUTION PANEL  
SCHEDULE

البركة لهندسة البترول والكهرباء  
**Enppi**  
ENGINEERING FOR THE PETROLEUM AND PROCESS AREA INDUSTRIES

SCALE	DOCUMENT NUMBER	REVISION
NTS	01251-100-030-EPS-001	03/05
		1



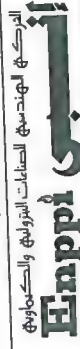
FOR CONTINUATION  
REFER TO SHEET 5

FOR CONTINUATION  
REFER TO SHEET 3

400V, 160A, 3PH+N, 50HZ, 25KA/1SECOND (SECTION-A)

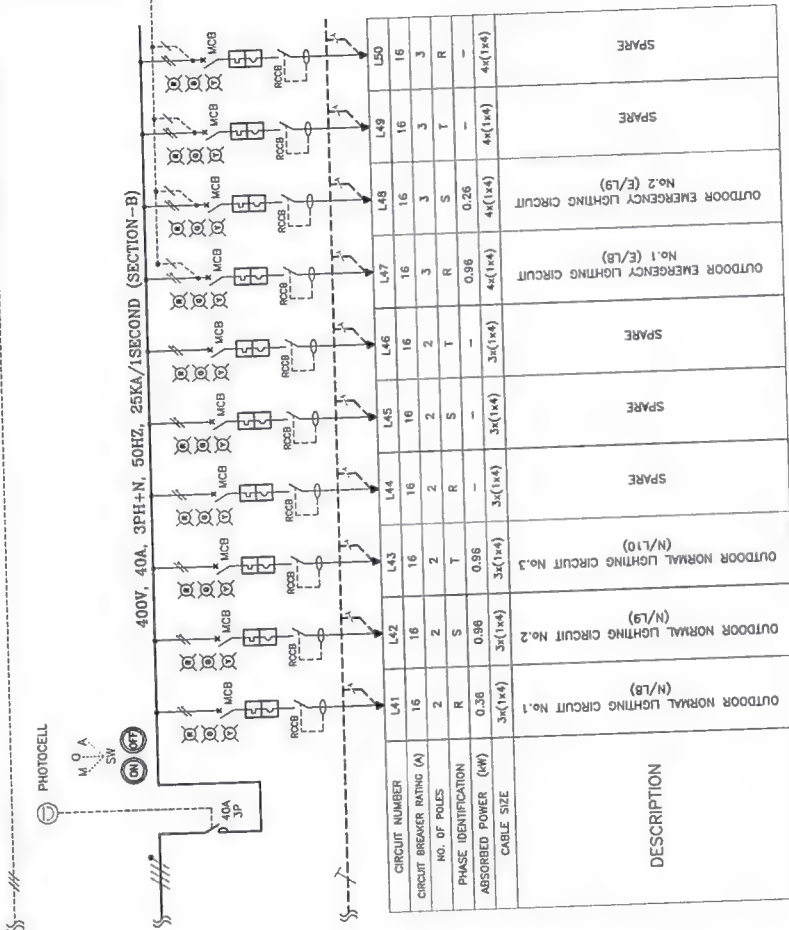
DESCRIPTION																
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EGPC CRUDE OIL TANK FARM  
AGROOD AREA (MODULE-1)  
SUBSTATION LIGHTING & POWER DISTRIBUTION PANEL  
SCHEDULE



SCALE	DOCUMENT NUMBER	SHEET	REVISION
NTS	01251-100-030-EPS-001	04/05	1

FOR CONTINUATION  
REFER TO SHEET 4





CIRCUIT NUMBER	L41	L42	L43	L44	L45	L46	L47	L48	L49	L50
CIRCUIT BREAKER RATING (A)	16	16	16	16	16	16	16	16	16	16
NO. OF POLES	2	2	2	2	2	2	3	3	3	3
PHASE IDENTIFICATION	R	S	T	R	S	T	R	S	T	R
ABSORBED POWER (kW)	0.38	0.86	0.96	—	—	—	0.96	0.26	—	—
CABLE SIZE	3x(1x4)	3x(1x4)	3x(1x4)	3x(1x4)	3x(1x4)	3x(1x4)	4x(1x4)	4x(1x4)	4x(1x4)	4x(1x4)
DESCRIPTION	OUTDOOR NORMAL LIGHTING CIRCUIT No.1 (N/LB)	OUTDOOR NORMAL LIGHTING CIRCUIT No.2 (N/LB)	OUTDOOR NORMAL LIGHTING CIRCUIT No.3 (N/L10)	SPARE	SPARE	SPARE	OUTDOOR EMERGENCY LIGHTING CIRCUIT No.1 (E/LB)	OUTDOOR EMERGENCY LIGHTING CIRCUIT No.2 (E/LB)	SPARE	SPARE

EGPC CRUDE OIL TANK FARM  
AGROOD AREA (MODULE-1)  
SUBSTATION LIGHTING & POWER DISTRIBUTION PANEL  
SCHEDULE




SCALE	NTS	DOCUMENT NUMBER	01251-100-030-EPS-001	SHEET	05/05	REVISION	1
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# 12.03- Motor Datasheets

System ID	System Description
030-EL-007	Substation Building Lighting and small power system
<div> <div>  <div> <div>Project: 01251-100</div> <div>CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</div> </div> </div> <div>  </div> </div>	

## 12.04- Electrical Cables Schedule

 <b>Enppi Petrojet</b> Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)	System ID 030-EL-007	System Description Substation Building Lighting and small power system
--	-------------------------	---



PAGE	Cable Mark	GL1	FROM	TO	GL2	CABLE Service	Service Voltage	KW	Size	Type	L
20	P-030-SUB-LPDP-1	WP	030-SUB-LVSWG-1 (A1-Q4)	030-SUB-LPDP-1	WP	3PH POWER FEEDER	480VAC	50	3.5x120	4B	30
20	C-030-SUB-PC-1	WP	030-SUB-LPDP-1	030-SUB-PC-1	EX	PHOTO CELL			3x2.5	C1	30

# 12.05- Electrical Cables Laying Certificates

System ID	030-EI-007
System Description	Substation Building Lighting and small power system



Project: 01251-100  
CRUDE OIL TANK FARM PROJECT (AGROOD AREA)














# 12.06- Electrical Cables Testing Certificates

 <p>Enppi PETROJET</p>		<p>Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</p> 	
System ID		030-EL-007	
System Description		Substation Building Lighting and small power system	



EGPC CRUDE OIL TANK FARM



	PETROJET	ENPPI	PMC
			

ITR-EL-0006A

ITR-EL-0006A



Enppi

EGPC CRUDE OIL TANK FARM



INSPECTION AND TEST REPORT FOR

CABLE INSULATION RESISTANCE TEST

SYSTEM NO.:

INSPECTION REPORT NUMBER

RFL- 262

INSPECTION DATE & TIME

DOCUMENT No.  
ITR-EL-0006A

DISCIPLINE  
ELECTRICAL

SHEET NO

INSTRUMENT TYPE:

SERIAL:

SERVICE VOLTAGE:  
220 v

TEST VOLTAGE:  
1kv

AREA / PACKAGE:

NO	Item/Tag NO.	CABLE SIZE	Continuity Test	PHASE TO PHASE "M.Ohm"			PHASE TO NEUTRAL "M.Ohm"			PHASES & NEUTRAL TO ARMOR "M.Ohm"			RESULT	
				BR-BK	BR-GR	BK-GR	BR-B	BK-B	GR-B	BR-ARM	BK-ARM	GR-ARM	B-ARM	Pass / FAIL
1	P-030-SUB-ACUPS-1A	3.5x120	✓											✓
2	P-030-SUB-ACUPS-1B	3.5x120	✓											✓
3	P-030-SUB-ACUPS-1B	3.5x50	✓											✓
4	C-030-SUB-PC-1	3x2.5	✓											✓
5	P-030-TOL-COTR	3x16	✓											✓
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														

Remarks :-

Reference :-

PETROJET

ENPPI

PMC

NAME :



SIGNATURE


DATE

Islam Shorifi

ITR-EL-0006A

12.07- Electrical Cables Termination Certificates

<div><div><div><div>Enppi</div><div>پتروپي</div></div></div><div><div>Project: 01251-100</div><div>CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</div></div><div></div></div>	
System ID	030-EL-007
System Description	Substation Building Lighting and small power system



EGPC CRUDE OIL TANK FARM

EGPC

Owner :

Egyptian General Petroleum Corporation (EGPC)

Contractor

CONSORTIUM (ENPPI / PETROJET)

Project No: 01251-100-030

Document No: ITR-QC-0001

Revision No.: 00

REQUEST FOR INSPECTION

ACTIVITY :

CABLE TERMINATION AND SPLICING

NOTIFICATION NO. :

PTJ-ELEC-RFI-262

DISCIPLINE :

E&I

DATE :

10/23/2021

NOTE:

Inspection result : A - Approved B - Reject C - Approved with Comment

NAME :

PETROJET

SIGNATURE

ENPPI

DATE

PMC

EGPC

ENPPI

PETROJET

EGPC

ENPPI

PETROJET

ITR-QC-0001





EGPC CRUDE OIL TANK FARM



CABLE TERMINATION AND SPLICING

INSPECTION AND TEST REPORT FOR

INSPECTION REPORT NUMBER 262  
INSPECTION DATE & TIME  
ITR NUMBER ITR-EL-0009  
DISCIPLINE ELEC  
SHEET NO 1 OF 1

Item/Tag No.  
Type :-  
Core:  
Size:

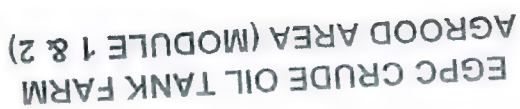
NO. Description of check  
ACCEPT  
REJECT  
N/A

1	Check cable glands are correct type and size as per cable schedule.		
2	Check there are no damages to cores, termination chamber layout is satisfactory, core identification is correct, crimped and pins		
3	Check cable tag is done correctly.		
4	Test and confirm conductor, phase continuity.		
5	Check insulation resistance test (megger) is completed *		
6	Check Hi-pot test is completed, only for MV/HV cables **		
7	Connect all cores at both ends and confirm all connections are correct as per termination diagram.		
8	Confirm spare cores, screens are earthed and conform to design drawings/specifications		
9	Check enclosure cover is installed, no damages and no bolts are missing		
10	Calibration test certificate of testing equipment to be checked.		

Remarks :

PETROJET	ENPPI	PMC
NAME :		
SIGNATURE		
DATE		

ITR-EL-0009



Ennpit



500413

Egyptian General Petroleum Corporation (EGPC)

CONSORTIUM (ENPPI / PETROJET)

Contractor

REQUEST FOR INSPECTION

PANEL INSTALLATION

ACTIVITY:

NOTIFICATION NO.

DATE:

REMARKS		INSPECTION		DATE / TIME	LOCATION	DESCRIPTION	NO.
		PM	ENPPI				

LIGHTING PANEL INSTALLATION

AGROD#01

030-SUB-LPDP-1

NOTE: Inspection result: A - Approved B - Reject C - Approved with Comment

NOTE:

PETROJET

NAME :

SIGNATURE

DATE \_\_\_\_\_

ENPPI

PMC

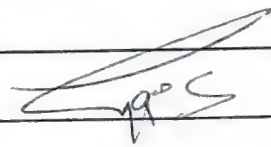
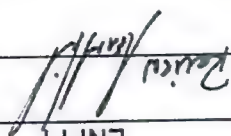
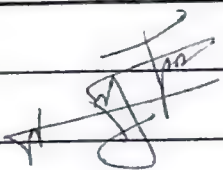
1TR-QC-0001

NO.	INSPECTION		
	ACCEPT	REJECT	N/A.

1	No damage has been found to equipment / component.	✓		
2	Correct type / size as per drawings.	✓		
3	Equipment foundation / supports are completed.			✓
4	Correct level / alignment / orientation as per drawings.	✓		
5	Identification / name plate - correct and properly attached.	✓		
6	Welding (if required) and touch up.			✓
7	Anchor bolting / Bolt correctly tightened.	✓		
8	Door locks operation / opening.			✓
9	Check all busbar connections.			✓
10	Check cable termination, connection, and cable marker.	✓		
11	Check on missing or loose part of lighting accessory properly.	✓		
12	All compartments to be cleaned internally and externally.	✓		
13	Earthing and bonding properly installed.		✓	

REMARKS:

REFERENCE DOCUMENTS:

NAME :	PETROJET	ENPPI	PMC
SIGNATURE			
DATE			





Owner : Egyptian General Petroleum Corporation (EGPC)  
Project No: 01251-100-030  
Document No: ITR-QC-0001  
Revision No.: 00

Contractor CONSORTIUM (ENPPI / PETROJET)

REQUEST FOR INSPECTION

ACTIVITY : CABLE TERMINATION AND TEST

NOTIFICATION NO. : PTJ-ELE-RFI- DISCIPLINE : ELEC

DATE : 27/03/2021

NO.	DESCRIPTION	LOCATION	DATE / TIME	PETROJET	ENPPI	PMC	REMARKS
18	D2-030-SUB-ACUPS-1-BAT-A	SUBSTATION					
19	D1-030-SUB-ACUPS-1-BAT-B	SUBSTATION					
20	D2-030-SUB-ACUPS-1-BAT-B	SUBSTATION					
21	D1-030-SUB-DCUPS-CB-A	SUBSTATION					
22	D2-030-SUB-DCUPS-CB-A	SUBSTATION					
23	D1-030-SUB-DCUPS-CB-B	SUBSTATION					
24	D2-030-SUB-DCUPS-CB-B	SUBSTATION					
25	D1-030-SUB-DCUPS-1-BAT-A	SUBSTATION					
26	D2-030-SUB-DCUPS-1-BAT-A	SUBSTATION					
27	D1-030-SUB-DCUPS-1-BAT-B	SUBSTATION					
28	D2-030-SUB-DCUPS-1-BAT-B	SUBSTATION					
29	P-030-SUB-LPDP-1	SUBSTATION					
30	P-030-SUB-ASP-1	SUBSTATION					
31	P-030-EPM1-UPDP-1	SUBSTATION					
32	P1-030-SUB-ACUPS-1	SUBSTATION					
33	P-030-SUB-IRP-1	SUBSTATION					
34	D-030-SUB-LVSWG-1A	SUBSTATION					



NOTE:

Inspection result : A - Approved B - Reject C - Approved with Comment

NAME : PETROJET ENPPI PMC

SIGNATURE

DATE

			
<b>EGPC CRUDE OIL TANK FARM</b>			
<b>INSPECTION AND TEST REPORT FOR</b>			
<b>CABLE TERMINATION AND SPLICING</b>			
INSPECTION REPORT NUMBER		ITR-EL-0009	
INSPECTION DATE & TIME		27/03/2021	
PTJ-ELE-RFI-		1 OF 1	
For All Cables tags in PTJ-ELE-RFI-			
Item/Tag NO.		Type :-	
Core:		Size:	
Description of check			
NO.		Description of check	
1		Check cable glands are correct type and size as per cable schedule.	
2		Check there are no damages to cores, termination chamber layout is satisfactory, core identification is correct, crimped and pins satisfactory.	
3		Check cable tag is done correctly.	
4		Test and confirm conductor, phase continuity.	
5		Check insulation resistance test (megger) is completed *	
6		Check Hi-pot test is completed, only for MV/HV cables **	
7		Connect all cores at both ends and confirm all connections are correct as per termination diagram.	
8		Confirm spare cores, screens are earthed and conform to design drawings/specifications	
9		Check enclosure cover is installed, no damages and no bolts are missing	
10		Calibration test certificate of testing equipment to be checked.	
Remarks :			
* : ITR-EL-006A/B ** : ITR-EL-008			
NAME :		PETROJET	
SIGNATURE		ENPPI	
DATE		PMC	
ITR-EL-0009			

**Enppi****EGPC CRUDE OIL TANK FARM  
AGROOD AREA (MODULE 1 & 2)****LIGHTING SYSTEM**

INSPECTION AND TEST REPORT FOR

**LIGHTING FIXTURE INSTALLATION CHECK LIST**

INSPECTION REPORT NUMBER

INSPECTION DATE &amp; TIME

ITR NUMBER

DISCIPLINE

SHEET NO

ITR-EL-0003

ELECTRICAL

TAG/ CIRCUIT No. :

PANEL :

AREA/PACKGE :

SYSTEM NO.:

LAMP TYPE: ☐ FLOURESCENT☐ HP SODIUM☒ LEDFIXTURE TYPE: ☐ GROUND STANCHION☐ PLATFORM STANCHION☐ BRACKET TYPE☒ CEILING MOUNTED☐ STREET LIGHTING☐ FLOODLIGHT TOWER☐ FENCE LIGHTING☐ GUARD LIGHTING

ITEM / TAG NO

TYPE

NO.	INSPECTION	RESULT		
		ACCEPT	REJECT	N/A.
1	No damage has been found to fixtures/junction box.	✓		
2	Correct type / size / identification as per drawings.	✓		
3	Identification / name plate attached correctly.		✓	
4	Lighting pole and support as per drawings.			✓
5	Welding (if required) and touch up.			✓
6	Anchor bolting / Bolt tightening.	✓		
7	Mounting height / orientation / direction / vertical alignment as per drawings.	✓		
8	Check cable termination, connection, and cable marker.	✓		
9	Assembling compartments properly installed	✓		
10	Conduit /conduit filled by compound.			✓
11	Earthing and bonding properly installed.			✓
12	Lamp test			✓

REMARKS:

REFERENCE DOCUMENTS:

	PETROJET	ENPPI	PMC
NAME			
SIGNATURE			
DATE			

ITR-EL-0003





EGPC CRUDE OIL TANK FARM  
AGROOD AREA (MODULE 1 & 2)



Project No: 01251-100-030  
:01251-100-031

Owner : Egyptian General Petroleum Corporation (EGPC)

Contractor	CONSORTIUM (ENPPI / PETROJET)
------------	-------------------------------

Document No: ITR-QC-0001  
Revision No. : 00

# REQUEST FOR INSPECTION

ACTIVITY : \_\_\_\_\_ PHOTOCELL INSTALLATION

NOTIFICATION NO. : PTJ-ELE-RFI-193 DISCIPLINE : E&I

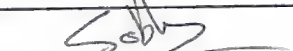


DATE : \_\_\_\_\_ 5/2/2021

[illegible]

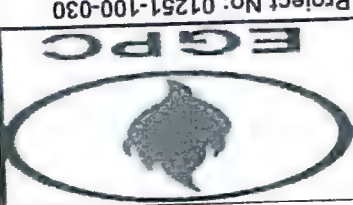
NOTE:

Inspection result : A - Approved B - Reject C - Approved with Comment

- stainless steel tags must be installed. (Date) 5/6/16

	<div> <div> PETROJET </div> </div>	<div> <div> ENPRI </div> <div> (®) Islam Sherif </div> </div>	<div> <div> PMC </div> </div>
NAME			
SIGNATURE			
DATE			

ITR-QC-0001



EGPC CRUDE OIL TANK FARM  
AGROD AREA (MODULE 1 & 2)

Enppi



Owner : Egyptian General Petroleum Corporation (EGPC)  
Project No: 01251-100-030  
Document No: ITR-QC-0001  
Revision No.: 00

### REQUEST FOR INSPECTION


ACTIVITY : LIGHTING FIXTURES INSTALLATION  
NOTIFICATION NO. : PTJ-ELE-RFI-187  
DISCIPLINE : E&I  
DATE : 5/2/2021

NO.	DESCRIPTION	LOCATION	DATE / TIME	INSPECTION			REMARKS
				PETROJET	ENPPI	PMC	
	FIRST FLOOR LIGHTING INSTALLATION	AGROD MODULE 01	2-May-21				
	INDOOR EMERGENCY CIRCUIT L4	21 FIXTURES					
	INDOOR EMERGENCY CIRCUIT L5	13 FIXTURES					
	INDOOR EMERGENCY CIRCUIT L6	15 FIXTURES					
	INDOOR EMERGENCY CIRCUIT L7	12 FIXTURES					
	INDOOR NORMAL CIRCUIT L4	19 FIXTURES					
	INDOOR NORMAL CIRCUIT L5	13 FIXTURES					
	INDOOR NORMAL CIRCUIT L6	8 FIXTURES					
	INDOOR NORMAL CIRCUIT L7	8 FIXTURES					


NOTE:

Inspection result : A - Approved B - Reject C - Approved with Comment

NAME :		PETROJET	ENPPI	PMC
SIGNATURE :				
DATE :				



**EGPC**  
AGROOD AREA (MODULE 1 & 2)



**Enppi**

INSPECTION AND TEST REPORT FOR

**LIGHTING FIXTURE INSTALLATION CHECK LIST**

INSPECTION REPORT NUMBER \_\_\_\_\_

INSPECTION DATE & TIME \_\_\_\_\_

ITR NUMBER \_\_\_\_\_

DISCIPLINE \_\_\_\_\_

SHEET NO \_\_\_\_\_

TAG/CIRCUIT No. : \_\_\_\_\_

PANEL : \_\_\_\_\_

AREA/PACKAGE : \_\_\_\_\_

SYSTEM NO. : \_\_\_\_\_

LAMP TYPE: ☐ FLOURESCENT ☒ HP SODIUM ☒ LED

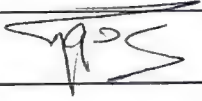
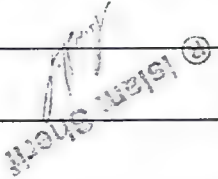
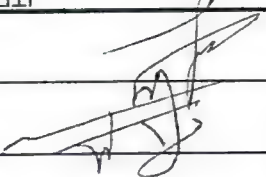
FIXTURE TYPE: ☐ GROUND STANCHION ☐ PLATEFORM STANCHION ☐ BRACKET TYPE ☒ CEILING MOUNTED

☐ STREET LIGHTING ☐ FLOODLIGHT TOWER ☐ FENCE LIGHTING ☐ GUARD LIGHTING

NO.	INSPECTION	RESULT		
		ACCEPT	REJECT	N/A.
1	No damage has been found to fixtures/junction box.	✓		
2	Correct type / size / identification as per drawings.	✓		
3	Identification / name plate attached correctly.			✓
4	Lighting pole and support as per drawings.			✓
5	Welding (if required) and touch up.			✓
6	Anchor bolting / Bolt tightening.	✓		
7	Mounting height / orientation / direction / vertical alignment as per drawings.	✓		
8	Check cable termination, connection, and cable marker.	✓		
9	Assembling compartments properly installed.	✓		
10	Conduit /conduit filled by compound.			✓
11	Earthing and bonding properly installed.			✓
12	Lamp test	✓		

REMARKS:

REFERENCE DOCUMENTS:

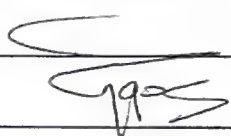
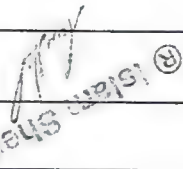
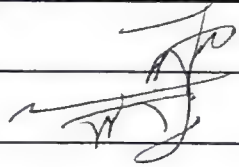
NAME:	PETROJET	ENPPI	PMC
SIGNATURE			
DATE			

ITR-EL-0003

NO.	INSPECTION	RESULT		
		ACCEPT	REJECT	N/A.
1	No damage has been found to devices/switches.	✓		
2	Correct type / size / identification as per drawings.	✓		
3	Identification / name plate attached correctly.			✓
4	Welding (if required) and touch up.			✓
5	Anchor bolting / Bolt tightening.	✓		
6	Mounting height / orientation / direction as per drawings.	✓		
7	Check cable termination, connection, and cable marker.	✓		
8	Assembling compartments properly installed.			
9	Conduit /conduit filled by compound.			✓
10	Earthing and bonding properly installed.			✓

REMARKS:

REFERENCE DOCUMENTS:

	PETROJET	ENPPI	PMC
NAME :			
SIGNATURE			
DATE			



Owner :	Egyptian General Petroleum Corporation (EGPC)	Project No: 01251-100-030	Document No: ITR-QC-0001	Revision No. : 00
Contractor	CONSORTIUM (ENPPI / PETROJET)			

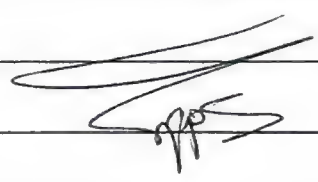
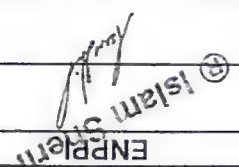
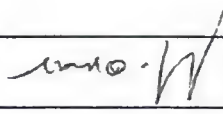
## REQUEST FOR INSPECTION

ACTIVITY :	LIGHTING FIXTURES INSTALLATION	NOTIFICATION NO. :	PTJ-ELE-RFI-189	DISCIPLINE :	E&I
DATE :	5/2/2021				

NO.	DESCRIPTION	LOCATION	DATE / TIME	INSPECTION	REMARKS
	INDOOR EMERGENCY CIRCUIT L1	14 FIXTURES			
	INDOOR EMERGENCY CIRCUIT L2	12 FIXTURES			
	INDOOR EMERGENCY CIRCUIT L3	12 FIXTURES			
	INDOOR NORMAL CIRCUIT L1	8 FIXTURES			
	INDOOR NORMAL CIRCUIT L2	15 FIXTURES			
	INDOOR NORMAL CIRCUIT L3	11 FIXTURES			
	CELLAR LIGHTING INSTALLATION	AGROD MODULE 01	2-May-21		

NOTE: Inspection result : A - Approved B - Reject C - Approved with Comment

Standen steel fogen must be installed.

NAME :	PETROJET	ENPPI	PMC
SIGNATURE			
DATE			



INSPECTION AND TEST REPORT FOR

**LIGHTING FIXTURE INSTALLATION CHECK LIST**

DISCIPLINE ELECTRICAL

SHEET NO

INSPECTION REPORT NUMBER

INSPECTION DATE & TIME

ITR NUMBER ITR-EL-0003

SYSTEM NO.

TAG/CIRCUIT No :      PANEL :      AREA/PACKGE :      SYSTEM NO.

LAMP TYPE:    ☐ FLOURESCENT    ☐ HP SODIUM    ☒ LED

FIXTURE TYPE:    ☐ GROUND STANCHION    ☐ PLATEFORM STANCHION    ☐ BRACKET TYPE    ☒ CEILING MOUNTED

☐ STREET LIGHTING    ☐ FLOODLIGHT TOWER    ☐ FENCE LIGHTING    ☐ GUARD LIGHTING

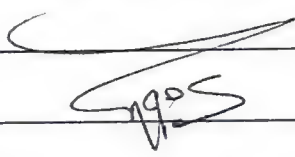

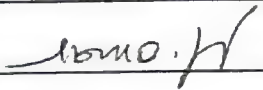
ITEM / TAG NO.

TYPE

NO.	INSPECTION	RESULT	
		ACCEPT	REJECT
1	No damage has been found to fixtures/junction box.	✓	
2	Correct type / size / identification as per drawings.	✓	
3	Identification / name plate attached correctly.	✓	
4	Lighting pole and support as per drawings.		✓
5	Welding (if required) and touch up.		✓
6	Anchor bolting / Bolt tightening.	✓	
7	Mounting height / orientation / direction / vertical alignment as per drawings.	✓	
8	Check cable termination, connection, and cable marker.	✓	
9	Assembling compartments properly installed.	✓	
10	Conduit /conduit filled by compound.		✓
11	Earthing and bonding properly installed.		✓
12	Lamp test	✓	

REMARKS:

REFERENCE DOCUMENTS:

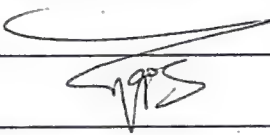
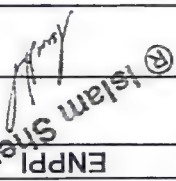
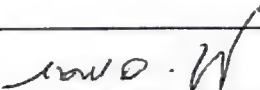
NAME :	PETROJET	ENPPI	PMc
SIGNATURE			
DATE			

NO.	INSPECTION	RESULT		
		ACCEPT	REJECT	N/A

1	No damage has been found to devices/switches.	✓		
2	Correct type / size / identification as per drawings.	✓	✓	
3	Identification / name plate attached correctly.			
4	Welding (if required) and touch up.			✓
5	Anchor bolting / Bolt tightening.	✓		
6	Mounting height / orientation / direction as per drawings.	✓		
7	Check cable termination, connection, and cable marker.	✓		
8	Assembling compartments properly installed.	✓		
9	Conduit /conduit filled by compound.			✓
10	Earthing and bonding properly installed.			✓

REMARKS:

REFERENCE DOCUMENTS:

NAME :	PETROJET	ENPPI	PMc
SIGNATURE			
DATE			

DATE		SIGNATURE		NAME		PETROJET		ENPPI		PMC	
Inspection result : A - Approved B - Reject C - Approved with Comment NOTE:											
OUTDOOR EMERGENCY CIRCUIT L8 14 FIXTURES OUTDOOR EMERGENCY CIRCUIT L9 6 FIXTURES OUTDOOR NORMAL CIRCUIT L8 6 FIXTURES OUTDOOR NORMAL CIRCUIT L9 16 FIXTURES OUTDOOR NORMAL CIRCUIT L10 4 FIXTURES OUTDOOR LIGHTING INSTALLATION AGROD MODULE 01 2-May-21											
NO.		DESCRIPTION		LOCATION		DATE / TIME		INSPECTION		REMARKS	
ACTIVITY : LIGHTING FIXTURES INSTALLATION NOTIFICATION NO. : PTJ-ELE-RFI-19 DISCIPLINE : E&I DATE : 5/2/2021											
REQUEST FOR INSPECTION											
Owner : Egyptian General Petroleum Corporation (EGPC) Project No: 01251-100-030 Document No: ITR-QC-0001 Revision No: 00											
Contractor CONSORTIUM (ENPPI / PETROJET)											
EGPC CRUDE OIL TANK FARM AGROD AREA (MODULE 1 & 2)											

EGPC


 EGPC CRUDE OIL TANK FARM  
 AGROD AREA (MODULE 1 & 2)

Enppi





**LIGHTING SYSTEM**

**INSPECTION AND TEST REPORT FOR LIGHTING FIXTURE INSTALLATION CHECK LIST**

INSPECTION REPORT NUMBER

DISCIPLINE

SHEET NO

INSPECTION DATE & TIME

ITR NUMBER

ITR-EL-0003

ELECTRICAL

TAG/CIRCUIT No : \_\_\_\_\_

LAMP TYPE: ☐ FLOURESCENT ☐ HP SODIUM ☒ LED

FIXTURE TYPE: ☐ GROUND STANCHION ☐ PLATFORM STANCHION ☐ BRACKET TYPE ☒ CEILING MOUNTED

☐ STREET LIGHTING ☐ FLOODLIGHT TOWER

PANEL : \_\_\_\_\_

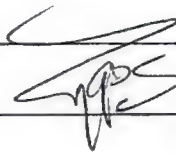
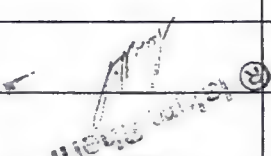
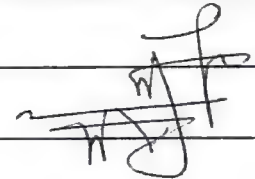
AREA/PACKGE : \_\_\_\_\_

SYSTEM NO.: \_\_\_\_\_

NO.	INSPECTION	RESULT	
		ACCEPT	REJECT
1	No damage has been found to fixtures/junction box.	<input checked="" type="checkbox"/>	
2	Correct type / size / identification as per drawings.	<input checked="" type="checkbox"/>	
3	Identification / name plate attached correctly.	<input checked="" type="checkbox"/>	
4	Lighting pole and support as per drawings.	<input checked="" type="checkbox"/>	
5	Welding (if required) and touch up.	<input checked="" type="checkbox"/>	
6	Anchor bolting / Bolt tightening.	<input checked="" type="checkbox"/>	
7	Mounting height / orientation / direction / vertical alignment as per drawings.	<input checked="" type="checkbox"/>	
8	Check cable termination, connection, and cable marker.	<input checked="" type="checkbox"/>	
9	Assembling compartments properly installed.	<input checked="" type="checkbox"/>	
10	Conduit /conduit filled by compound.	<input checked="" type="checkbox"/>	
11	Earthing and bonding properly installed.	<input checked="" type="checkbox"/>	
12	Lamp test	<input checked="" type="checkbox"/>	

**REMARKS:**

**REFERENCE DOCUMENTS:**

NAME :	PETROJET	ENPPI	PMC
SIGNATURE			
DATE			

**LIGHTING SYSTEM**

INSPECTION AND TEST REPORT FOR

**POWER OUTLET INSTALLATION CHECK LIST**

INSPECTION REPORT NUMBER \_\_\_\_\_ INSPECTION DATE & TIME \_\_\_\_\_ ITR NUMBER \_\_\_\_\_ DISCIPLINE \_\_\_\_\_ SHEET NO \_\_\_\_\_

ITR-EL-0004 ELECTRICAL


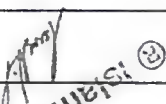
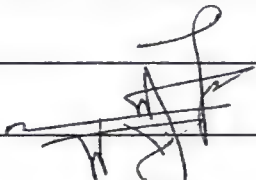
TAG :	CIRCUIT No :	PANEL :	AREA/PACKGE :	SYSTEM NO. :
TYPE: <input type="checkbox"/> WELDING RECEPTACLE <input type="checkbox"/> CONVENIENCE OUTLET				
ITEM / TAG NO.				
TYPE				

NO.	INSPECTION			RESULT
	1	2	3	
	No damage has been found to devices/switches.	✓		
2	Correct type / size / identification as per drawings.	✓		
3	Identification / name plate attached correctly.		✓	
4	Welding (if required) and touch up.			✓
5	Anchor bolting / Bolt tightening.	✓		
6	Mounting height / orientation / direction as per drawings.	✓		
7	Check cable termination, connection, and cable marker.	✓		
8	Assembling compartments properly installed.	✓		
9	Conduit /conduit filled by compound.			✓
10	Earthing and bonding properly installed.			✓

REMARKS:



--

REFERENCE DOCUMENTS:



	PETROJET	ENPPI	PMc
NAME :			
SIGNATURE			
DATE			

ITR-EL-0004

## 12.08- FAT Reports & Certificates

System Description	Substation Building Lighting and small power system
System ID	030-EL-007
<div><div><p>Enppi PETROJET</p></div><div><p>Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</p></div><div><p>الوزارة العامة للهيدروكربون الكويت</p></div></div>	

## 12.09- SAT Reports & Certificates

System ID	030-EL-007
System Description	Substation Building Lighting and small power system
<div><div><p>Enppi PETROJET</p></div><div><p>Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</p></div><div><p>الوزارة العراقية للنفط Ministry of Oil, Iraq</p></div></div>	

## Indoor and Outdoor Lighting Lux Test Certificate of Completion and Acceptance

Client	Egyptian General Petroleum Corporation (EGPC)
Project No.	1251-100
Project Description	Crude Oil Tank Farm Project
Location	Agrood Area 30 (Module-01)
Systems	<ul style="list-style-type: none"> <li>• (030-EL-007) Substation Building Lighting and Small Power System</li> <li>• (030-EL-014) Plant Area Lighting and Small Power System</li> </ul>
Completion Date	27 of October 2021
Attachments	• Lux Test Measurements Values.

### Remarks

- This is to certify that the systems described in this certificate of completion has been lux tested using a calibrated lux meter after final installation and signing of the mechanical completion and RFSU for all lighting systems in accordance with the requirements of the scope of work.
- Lux test has been witnessed by client representatives and accepted as complete in all aspects on the data marked on the certificate of completion and acceptance.
- The test has been completed to the client satisfaction with no comments raised.

Performed by <b>PETROJET</b>	Supervised by <b>ENPPI</b>	Approved by <b>PPC</b>
Name: <b>Sobhy Saleem</b>	Name: <b>Mohamed Ibrahim</b>	Name: <b>Ela. manager.</b>
Title: <b>ESI Qc Engineer</b>	Title: <b>Ela. manager.</b>	Title: <b>Ela. manager.</b>
Signature: 	Signature: 	Signature: 
Date: <b>28-10-2021</b>	Date: <b>28-10-2021</b>	Date: <b>28-10-2021</b>




# Lux Test Reading for Outdoor and Indoor Lighting for Agrood Area 30 (Module-01)

Remarks:

Location	API RP 540 Value (Lux)	Actual Tested Value (Lux)
Indoor (SWG Room)	50	425
Indoor (Control Room)	50	575
Indoor (Office Room)	50	542
Indoor (Cellar Room)	50	67
Indoor (Telecom. Room)	50	570
Indoor (Security Room)	50	685
Indoor (Battery Room)	50	375
Outdoor (Tank 01 Dike)	5	9
Outdoor (Tank 02 Dike)	5	11
Outdoor (Tank 03 Dike)	5	10
Outdoor (Tank 04 Dike)	5	10
Fire Pumps Area	50	75
Shipping Pumps Area	50	55
Northern Street	10	30
Southern Street	10	30
Eastern Street	10	35
Western Street	10	35

12.10- Electrical Pre-Commissioning Check Lists


System ID		030-EL-007
System Description		Substation Building Lighting and small power system



Enppi

Project: 01251-100

CRUDE OIL TANK FARM PROJECT (AGROOD AREA)



الهيئة العامة للغازات والبترول

# PRE-COMMISSIONING CHECK LIST LIGHTING AND SMALL POWER MATERIAL EL-23 A

PROJECT TITLE : CRUDE OIL TANK FARMS PROJECT, AGROOD AREA 30 (MODULE-1)	
PROJECT NUMBER : 01251-100	DISCIPLINE : Electrical
SYSTEM NAME : Substation Building Lighting and small power system	
SUB-SYSTEM NAME :	SUB-SYSTEM ID :
ITEM TAG No. : 030-SUB-LPDP - 1 Power Distribution Panel	AREA :
REF. DWGS/DOCS :	

No.	DESCRIPTION	OK/NA/PL	ITEM No.
		RESULT	PL

1	Construction punch list to be checked.	✓	
2	Check to ensure that all the fittings meet the requirement of Hazardous area classification.	✓	
3	Check location and fixing method of light fittings in accordance with approved drawings.	✓	
4	Inspect light fittings for mechanical damage.	✓	
5	Check that lighting equipments are correctly located and not obstructed by other equipments.	✓	
6	Check equipment fixings and mountings are secure.	✓	
7	Check equipment fixings and mountings are secure.	✓	
8	Check circuit numbering and correct identification label.	✓	
9	Earthing connections to the earthing grid to be checked.	✓	
10	Check lighting fixture inside & outside cleaning.	✓	
11	Check lighting fixture/junction box for sealing & tightening.	✓	

## REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

[illegible]

REMARKS AND OBSERVATIONS :			
OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.			
COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			



# PRE-COMMISSIONING CHECK LIST

## SOCKETS

### EL-24 A

PROJECT TITLE : CRUDE OIL TANK FARMS PROJECT, AGROOD AREA 30 (MODULE-1)	
PROJECT NUMBER : 01251-100	DISCIPLINE : Electrical
SYSTEM NAME : Substation Building Lighting and small power system	
SYSTEM ID : 030-EL-002	SUB-SYSTEM ID :
SUB-SYSTEM NAME :	
ITEM TAG No. : 030-SUB-LPDP - 1 Power Distribution Panel	AREA :
REF. DWGS/DOCS :	

No.	DESCRIPTION	RESULT	OK/NA/PL	ITEM No.
		PL		
1	Construction punch list to be checked.	✓		
2	Check to ensure that all the sockets fittings meet the requirement of Hazardous area classification.	✓		
3	Check location and fixing method of sockets in accordance with approved drawings.	✓		
4	Inspect sockets for mechanical damage.	✓		
5	Check that sockets are correctly located and not obstructed by other equipments.	✓		
6	Check equipment fixings and mountings are secure.	✓		
7	Check cable circuit connections to sockets against the approved drawing.	✓		
8	Check circuit numbering and correct identification label.	✓		
9	Check sockets inside & outside cleaning.	✓		
10	Check sockets for sealing & tightening.	✓		
11	Earthing connections to the earthing grid to be checked.	✓		

#### REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

# PRE-COMMISSIONING CHECK LIST

## SOCKETS

### EL-24 A

PROJECT TITLE : CRUDE OIL TANK FARMS PROJECT, AGROOD AREA 30 (MODULE-1)

PROJECT NUMBER : 01251-100

DISCIPLINE : Electrical

SYSTEM NAME : Substation Building Lighting and small power system

SYSTEM ID : 030-EL-007

SUB-SYSTEM NAME : SUB-SYSTEM ID :

ITEM TAG No. : 030-SUB-LPDP - 1 Power Distribution Panel

AREA :

REF. DWGS/DOCS :

No.	DESCRIPTION	RESULT	OK/NA/PL	ITEM No.
		PL		

12 Plugs of socket outlets fit properly and mechanical interlocks operate correctly.

✓

13 Junction boxes are well sealed and holes that are not used to be plugged with plugs suiting hazardous area classification.

✓

14 Contractor marked up drawings is available.

✓

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
---------	-------------------	-------	----------

NAME

SIGNATURE

DATE

# PRE-COMMISSIONING CHECK LIST

## LOW VOLTAGE CABLES

### EL-30 A

PROJECT TITLE : CRUDE OIL TANK FARMS PROJECT, AGROOD AREA 30 (MODULE-1)

PROJECT NUMBER : 01251-100	DISCIPLINE : Electrical
SYSTEM NAME : Substation Building Lighting and small power system	SYSTEM ID : 030 - EL - 007
SUB-SYSTEM NAME :	SUB-SYSTEM ID :
ITEM TAG No. : 030-SUB-LPDP - 1 Power Distribution Panel	AREA :
REF. DWGS/DOCS :	

No.	DESCRIPTION	OK/NA/PL	ITEM No.
		RESULT	PL

1	Construction punch list to be checked.	✓	
2	Check cables are correctly fixed to trays and supports.	✓	
3	Check cables through walls or ceilings are correctly sealed.	NA	
4	Check that all cables (power/ control) are installed in accordance with cable lists and approved documents.	✓	
5	Check identification tags of all conductors and wires.	✓	
6	Check connection, tightness, termination and joints of cables are correctly executed.	✓	
7	Check where conductors have been terminated using crimped connections; ensure the correct size and type of crimping lugs.	✓	
8	Check that the bending radius of cables is not less than the minimum established.	✓	
9	Cable markers to be installed before covering buried cables or cables in cable trays.	✓	
10	Tie wraps to be used for cable and wires fixation.	✓	
11	Cable connections shall be torque tested.	NA	

#### REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			



# PRE-COMMISSIONING CHECK LIST

## LOW VOLTAGE CABLES

### EL-30 A

PROJECT TITLE : CRUDE OIL TANK FARMS PROJECT, AGROOD AREA 30 (MODULE-1)

PROJECT NUMBER : 01251-100

DISCIPLINE : Electrical

SYSTEM NAME : Substation Building Lighting and small power system

SYSTEM ID : 030-EL-007

SUB-SYSTEM NAME : 030-SUB-LPDP - I Power Distribution

AREA : Panel

REF. DWGS/DOCS :

No.	DESCRIPTION	OK/NA/PL	ITEM No.
		RESULT	PL

12	Check that buried cables are correctly covered and protected.	✓	
13	Trench markers to be checked w.r.t approved documents.	NA	
14	Check cable glands for tightness & check the correct type of gland has been used for the size and type of installed cables.	✓	
15	Inspect cable laid in trenches, segregation and protection.	✓	
16	Cables to be tested (continuity/insulation resistance). (*)	✓	
17	Equipment test report and inspection certificate to be checked.	✓	
18	Check availability of vendor documents, including commissioning and start-up instructions. (If Any)	NA	
19	Calibration test certificate of testing equipment to be checked.	NA	

REMARKS AND OBSERVATIONS :  
(\*) Refer to table (III).

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			





**PRE-COMMISSIONING CHECK LIST**  
**LOW VOLTAGE CABLES**  
**EL-30 A**

**INSULATION TEST**

**LOW VOLTAGE CABLES**

CABLE VOLTAGE LEVEL	D.C TEST VOLTAGE	MINIMUM INSULATION RESISTANCE (M.OHMS).
1000V	1000V	200

**TABLE [III]**

**NOTES:**

Manufacturer's test voltage & minimum values for insulation resistance should be referenced.

# PRE-COMMISSIONING CHECK LIST

## MEDIUM VOLTAGE CABLES

### EL-31 A

PROJECT TITLE : CRUDE OIL TANK FARMS PROJECT, AGROOD AREA 30 (MODULE-1)	
PROJECT NUMBER : 01251-100	DISCIPLINE : Electrical
SYSTEM NAME : Substation Building Lighting and small power system	
SUB-SYSTEM NAME : SUB-SYSTEM ID :	SYSTEM ID : 030-EL-007
ITEM TAG No. : C-030-SUB-PC-1	AREA :
REF. DWGS/DOCS :	

No.	DESCRIPTION	RESULT	OK/NA/PL	ITEM No.
		PL		
1	Construction punch list to be checked.	✓		
2	Check cables are correctly fixed to trays and supports.	✓		
3	Check cables through walls or ceilings are correctly sealed.	NA		
4	Check that all cables are installed in accordance with cable lists and approved documents.	✓		
5	Check identification tags of all conductors and wires.	✓		
6	Check connection, termination and joints of cables are correctly executed.	✓		
7	Inspect cables for jacket damage.	✓		
8	Ensure that the correct size and type of crimping lugs have been used.	✓		
9	Check that the bending radius of cables is not less than the minimum established.	✓		
10	Cable markers to be installed before covering buried cables or cables in cable trays.	✓		
11	Tie wraps to be used for cable and wires fixation.	✓		

#### REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

# PRE-COMMISSIONING CHECK LIST

## MEDIUM VOLTAGE CABLES

### EL-31 A

PROJECT TITLE : CRUDE OIL TANK FARMS PROJECT, AGROOD AREA 30 (MODULE-1)

PROJECT NUMBER : 01251-100	DISCIPLINE : Electrical
SYSTEM NAME : Substation Building Lighting and small power system	SYSTEM ID : 030-EL-007
SUB-SYSTEM NAME :	SUB-SYSTEM ID :
ITEM TAG No. : C-030-SUB-PC-1	AREA :
REF. DWGS/DOCS :	

No.	DESCRIPTION	RESULT	OK/NA/PL	ITEM No.
		PL		

12	Trench markers to be checked w.r.t approved documents.	NA		
13	Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables.	✓		
14	Inspect cable laid in trenches, segregation and protection.	✓		
15	Cables to be tested (continuity/insulation resistance).(*)	✓		
16	Equipment test report and inspection certificate to be checked.	✓		
17	Check availability of vendor documents, including commissioning and start-up instructions. (If Any)	NA		
18	Calibration test certificate of testing equipment to be checked.	NA		

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

NOTES:

TABLE II



200	5000V	6.6kV & Above
200	2500V	3.3kV
MINIMUM INSULATION RESISTANCE (M.OHMS).	D.C TEST VOLTAGE	CABLE VOLTAGE LEVEL

INSULATION TEST  
EL-31 A

PRE-COMMISSIONING CHECK LIST  
MEDIUM VOLTAGE CABLES  
EL-31 A



No.	DESCRIPTION	OK/NA/PL	ITEM No.
		RESULT	PL
1	Construction punch list to be checked.	✓	
2	Check cables are correctly fixed to trays and supports.	✓	
3	Check cables through walls or ceilings are correctly sealed.	NA	
4	Check that all cables are installed in accordance with cable lists and approved documents.	✓	
5	Check identification tags of all conductors and wires.	✓	
6	Check connection, termination and joints of cables are correctly executed.	✓	
7	Inspect cables for jacket damage.	✓	
8	Ensure that the correct size and type of crimping lugs have been used.	✓	
9	Check that the bending radius of cables is not less than the minimum established.	✓	
10	Cable markers to be installed before covering buried cables or cables in cable trays.	✓	
11	Tie wraps to be used for cable and wires fixation.	✓	

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			

# PRE-COMMISSIONING CHECK LIST MEDIUM VOLTAGE CABLES EL-31 A

PROJECT TITLE : CRUDE OIL TANK FARMS PROJECT, AGROOD AREA 30 (MODULE-1)	
PROJECT NUMBER : 01251-100	DISCIPLINE : Electrical
SYSTEM NAME : Substation Building Lighting and small power system	
SUB-SYSTEM NAME : SUB-SYSTEM ID :	
ITEM TAG No. : P-030-SUB-LPDP-1	AREA :
REF. DWGS/DOCS :	

No.	DESCRIPTION	RESULT	OK/NA/PL	ITEM No.
		PL		
12	Trench markers to be checked w.r.t approved documents.	✓	NA	
13	Check cable glands for tightness and check the correct type of gland has been used for the size and type of installed cables.	✓	✓	
14	Inspect cable laid in trenches, segregation and protection.	✓	✓	
15	Cables to be tested (continuity/insulation resistance).(*)	✓	✓	
16	Equipment test report and inspection certificate to be checked.	✓	✓	
17	Check availability of vendor documents, including commissioning and start-up instructions. (If Any)	✓	NA	
18	Calibration test certificate of testing equipment to be checked.	✓	NA	

REMARKS AND OBSERVATIONS :

OK: NO OBJECTION, NA: NOT APPLICABLE, PL: PUNCH LIST.

COMPANY	CONST. CONTRACTOR	ENPPI	CUSTOMER
NAME			
SIGNATURE			
DATE			





**PRE-COMMISSIONING CHECK LIST  
MEDIUM VOLTAGE CABLES  
EL-31 A**

**INSULATION TEST**



**EL-31 A**

CABLE VOLTAGE LEVEL		
D.C TEST VOLTAGE		
MINIMUM INSULATION RESISTANCE (M.OHMS).		
3.3kV	2500V	200
6.6kV & Above	5000V	200



**TABLE (I)**



**NOTES:**

## 12.11- Electrical Supplier Check Lists & Reports

System ID	030-EL-007
System Description	Substation Building Lighting and small power system
<div>  <p>Enppi PETROJET</p> </div> <div> <p>Project: 01251-100</p> <p>CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</p>  </div>	



# 13- Electrical Commissioning

System ID		030-EI-007
System Description		Substation Building Lighting and small power system
<div><div><div><div><div>Enppi</div><div>PROJECT</div></div></div><div><div>Project: 01251-100</div><div>CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</div><div></div></div></div></div>		



<div><p>Enppi</p><p>Project: 01251-100</p><p>CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</p><p>الهيئة العامة للغذاء والدواء Petroleum Regulatory Company</p></div>	
System ID	030-EI-007
System Description	Substation Building Lighting and small power system

13.01 - Electrical -Commissioning Check Lists

13.02- Electrical Supplier Check Lists & Reports



System ID	030-EL-007
System Description	Substation Building Lighting and small power system
<div><div><div><div>Project: 01251-100</div><div>CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</div><div></div></div></div></div>	

# 14- Red Marked-up Drawings



System ID	030-EL-007
System Description	Substation Building Lighting and small power system
<div data-bbox="1141 1944 1417 2033">  </div> <div data-bbox="550 1955 1045 2011"> <p>Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</p> </div> <div data-bbox="268 1933 467 2022">  </div>	





14.01- P&ID

System Description	Substation Building Lighting and small power system
System ID	030-EI-007
<div data-bbox="1145 1951 1422 2033"> PETROJET</div> <div data-bbox="549 1951 1046 2007">Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</div> <div data-bbox="272 1935 469 2018"> Petrojet Refining Company</div>	

# 14.02- Instrumentation Drawings

System ID	System Description
030-EI-007	Substation Building Lighting and small power system
<div data-bbox="1141 1944 1428 2027">  </div> <div data-bbox="545 1948 1048 2007"> <p>Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)</p> </div> <div data-bbox="269 1928 469 2016">  </div>	

14.03- Electrical Drawings

 Enppi PETROJET	
Project: 01251-100 CRUDE OIL TANK FARM PROJECT (AGROOD AREA)	
	
System ID	030-EL-007
System Description	Substation Building Lighting and small power system